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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/610,012	07/03/2000	Tien-Jen Lin	H000029	3669

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EXAMINER

NGUYEN, JENNIFER T

ART UNIT	PAPER NUMBER
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2674

DATE MAILED: 10/16/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/610,012

Applicant(s)

LIN, TIEN-JEN

Examiner

Jennifer T Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on reconsideration filed on 07/29/2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

### DETAILED ACTION

1. This Office Action is responsive to the Amendment filed on 05/21/2002. The claims 1-11 are pending.

#### *Double Patenting*

2. Claims 1-11 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-8 of copending Application No. 09/609,651 (Lin et al.). Although the conflicting claims are not identical, they are not patentably distinct from each other because the only differences between claims in the two applications are scanning interface and connector. In claims of instant application No. 09/610012 discloses first and second scanning interfaces. In claims of copending application No. 09/609,651 discloses a scanning interface. It would have been obvious to a person having ordinary skill in the art at the time the invention was made to make separately one scanning interface become first and second scanning interfaces.

In claims of instant application No. 09/610012 discloses a connector (126). In claims of copending application No. 09/609,651 discloses first and second connector (CN1) and (CN2). It would have been obvious to a person having ordinary skill in the art at the time the invention was made to make integrally first connector (CN1) and second connector (CN2) become a connector (126) to reduce the cost of the whole system.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

**This Double Patenting rejection will be withdrawn when Applicant files Terminal Disclaimer.**

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

4. Claims 1-4, 7, 9 and 10 are rejected under 35 U.S.C. 102(e) as being anticipated by Imamura (U.S. Patent No. 6,232,949).

Regarding claim 1, referring to Fig. 1, Imamura teaches a liquid crystal display module, comprising: a liquid crystal display panel (1) having a plurality of scanning lines parallel to a first side (5) of the liquid crystal display panel (1); a driving circuit unit (5) for generating a first scanning control signal and a second scanning control signal; a first scanning unit (8L) coupled to the driving circuit unit and a second side of the liquid crystal display panel (1) adjacent to the first side (5) of the liquid crystal display panel (1), for receiving the first scanning control signal and sequentially driving each of the scanning lines in the liquid crystal display panel (1); and a second scanning unit (8R), coupled to the driving circuit unit and a third side of the liquid crystal display panel (1) opposite to the second side of the liquid crystal display panel (1), for receiving

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the second scanning control signal and sequentially driving each of the scanning lines in the liquid crystal display panel (1); wherein the first scanning unit (8L) and the second scanning unit (8R) drive one of the scanning lines simultaneously (from col. 2, line 60 to col. 3, line 1, col. 5, lines 35-54 and col. 6, lines 42-53).

Regarding claim 2, Imamura teaches the liquid crystal display module wherein the first scanning unit (8L) comprises: a first scanning circuit board, coupled to the driving circuit unit, for receiving the first scanning control signal; and a plurality of first scan drivers, coupled between the first scanning circuit board and the second side of the liquid crystal display panel (1), for sequentially scanning the scanning lines according to the first scanning control signal; and the second scanning unit (8R) comprises: a second scanning circuit board, coupled to the driving circuit unit, for receiving the second scanning control signal; and a plurality of second scan drivers coupled to the second scanning circuit board and the third side of the liquid crystal display panel (1), for sequentially scanning the scanning lines according to the second scanning control signal (Fig. 1, from col. 2, line 60 to col. 3, line 1, col. 5, lines 35-54 and col. 6, lines 42-53).

Regarding claim 3, Imamura teaches the liquid crystal display module wherein the first scanning circuit board is the same as the second scanning circuit board (from col. 2, line 68 to col. 3, line 1, col. 6, lines 3-24).

Regarding claim 4, Imamura teaches the first scanning circuit board is connected to the first scan drivers with a first side, and the second scanning circuit board is connected to the scan drivers with a second side opposite to the first side (Fig. 1)

Regarding claim 7, Imamura teaches the first scanning control signal includes a first data shifting direction signal (out) and the second scanning control signal includes a second data shifting direction signal (out) (Fig. 4, col. 4, lines 4-39).

Regarding claim 9, Imamura teaches a scanning circuit board, located in a liquid crystal display module with a liquid crystal display panel (1) for connecting with a plurality of scanning drivers to scan a plurality of scanning lines extending from a first side (8L) of the liquid crystal display panel (1) to a second side (8R) of the liquid crystal display panel (1), inherently, comprising: a connector for connecting with an external connector and receiving a scanning control signal; a first scanning interface, located at a first side of the scanning circuit board, for transferring the scanning control signal to the scan drivers connected with the first scanning interface and driving each of the scanning lines from the first side of the liquid crystal display panel (1); and a second scanning interface located at a second side of the scanning circuit board opposite to the first side of the scanning circuit board, for transferring the scanning control signal to the scan drivers connected with the second scanning interface and driving each of the scanning lines from the second side of the liquid crystal display panel (1) (Figs. 1 and 4)

Regarding claim 10, Imamura teaches the scanning control signal contains a data shifting direction signal (Fig. 4, col. 4, lines 4-39).

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Imamura (U.S. Patent No. 6,232,949) in view of Prior Art Fig. 1, cited by Applicant.

Regarding claim 6, Imamura differs from claim 6 in that he does not specifically teach the first scan drivers and the second scan drivers are integrated circuits with tape carrier packages. However, the Prior Art Fig. 1 discloses first scan drivers and the second scan drivers are integrated circuits with tape carrier packages (TCP) (Description of the Prior Art, Fig. 1). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the scan drivers as taught by Prior Art Fig. 1 in the system of Imamura in order to simplify the circuitry, save space and reduce weight and cost of the whole system.

7. Claims 5, 8 and 11 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

8. Applicant's arguments with respect to claims 1-11 have been considered but are moot in view of the new ground(s) of rejection.

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Cairns et al. (U.S. Patent No. 6,437,767) teaches active matrix devices

### **Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Jennifer T. Nguyen** whose telephone number is **703-305-3225**. The examiner can normally be reached on Mon-Fri from 9:00-5:30.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Richard A Hjerpe** can be reach at **703-305-4709**.

**Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks

Washington, DC. 20231

**Or faxed to: 703-872-9314 (for Technology Center 2600 only)**

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive,  
Arlington, VA, sixth-floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Technology Center 2600 Customer Service Office whose telephone number is 703-306-0377.

Jennifer T. Nguyen  
Patent Examiner  
Art Unit 2674



**RICHARD HJERPE  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600**